

What is claimed is:

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1. A tilt mechanism for an umbrella comprising  
a first tubular member for securement to a first section of an umbrella pole;  
a second tubular member for securement to a second section of an umbrella pole;  
a catch mounted in one of said members and projecting into the other of said members, said catch having a plurality of recesses at an end projecting into said other tubular member; and  
a pin mounted in said other of said tubular members transversely of and in one of said recesses of said catch to lock said tubular members relative to each other.
2. A tilt mechanism as set forth in claim 1 wherein at least one of said pin and said catch are movable relative to each other to release said pin from a selected one of said recesses.
3. A tilt mechanism as set forth in claim 2 which further comprises spring means in said other tubular member for biasing said pin towards said catch.
4. A tilt mechanism as set forth in claim 1 wherein said spring means includes a coil spring abutting said pin and a plate secured in said other of said tubular members and abutting said coil spring. *not shown*
5. A tilt mechanism as set forth in claim 1 wherein said pin is slidably mounted in said other of said tubular members to move away from said catch to allow said other tubular member to tilt relative to said one tubular member.
6. A tilt mechanism as set forth in claim 1 wherein said end of said catch is spaced concentrically from second tubular member with said tubular members in

alignment with each other and is in abutment with said second tubular member in a terminal tilted position of said tubular members relative to each other.

7. A tilt mechanism as set forth in claim 6 wherein said tubular members have contoured interfitting end surfaces to define a smooth cylindrical contour therebetween with said tubular members in alignment with each other.

8. A tilt mechanism as set forth in claim 1 wherein said other of said tubular members has a pair of oppositely disposed elongated slots and said pin projects through said slots for grasping thereof.

9. A tilt mechanism for an umbrella comprising  
a first tubular member for securement to a first section of an umbrella pole;  
a second tubular member for securement to a second section of an umbrella pole;

a catch fixedly mounted in one of said members and having a stem projecting into and pivotally secured to the other of said members to allow said members to pivot relative to each other, said stem having a plurality of recesses at an end thereof; and

a pin mounted in said other of said tubular members transversely of and in one of said recesses of said catch to lock said tubular members relative to each other.

10. A tilt mechanism as set forth in claim 9 wherein at least one of said pin and said catch are movable relative to each other to release said pin from a selected one of said recesses.

11. A tilt mechanism as set forth in claim 10 which further comprises spring means in said other tubular member for biasing said pin towards said catch.

12. A tilt mechanism as set forth in claim 11 wherein said spring means includes a coil spring abutting said pin and a plate secured in said other of said tubular members and abutting said coil spring.

13. A tilt mechanism as set forth in claim 9 wherein said pin is slidably mounted in said other of said tubular members to move away from said catch to allow said other tubular member to tilt relative to said one tubular member.

14. A tilt mechanism as set forth in claim 13 wherein said pin has a rounded head at each end projecting from said other tubular member for manual contact thereof.

15. A tilt mechanism for an umbrella comprising  
a first tubular member for securement to an upper section of an umbrella pole;  
a second tubular member for securement to a lower section of an umbrella pole;  
a catch fixedly mounted in said first member and having a stem projecting into said second member, said stem having a plurality of recesses at a lower end thereof;

a rivet pivotally securing said stem in said second member to allow said members to pivot relative to each other; and

a pin mounted in said second member transversely of and in one of said recesses of said catch to lock said tubular members relative to each other.

16. A tilt mechanism as set forth in claim 15 which further comprises spring means mounted in said second tubular member for biasing said pin towards said catch and into a selected one of said recesses.

17. A tilt mechanism as set forth in claim 16 wherein said spring means includes a coil spring abutting said pin and a plate secured in said second member and abutting said coil spring.

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18. A tilt mechanism as set forth in claim 17 wherein said plate is frictionally secured within and transversely of said second member.

19. A tilt mechanism as set forth in claim 15 wherein one of said recesses is disposed centrally of said stem and a pair of recesses is disposed to opposite sides of said centrally disposed recess.

X 20. A tilt mechanism as set forth in claim 15 wherein said first member has a bore at an upper end to receive an upper wood section of a pole therein and said second member has a bore at a lower end to receive a lower wood section of a pole therein.

Y 21. A tilt mechanism as set forth in claim 15 wherein said first member has a reduced diameter portion at an upper end to receive an upper metal section of a pole thereon and said second member has a reduced diameter portion at a lower end to receive a lower metal section of a pole thereon.

22. A tilt mechanism as set forth in claim 15 wherein said stem is spaced concentrically from second tubular member with said tubular members in alignment with each other and is in abutment with said second tubular member in a terminal tilted position of said tubular members relative to each other.

23. A tilt mechanism as set forth in claim 22 wherein said tubular members have contoured interfitting end surfaces to define a smooth cylindrical contour therebetween with said tubular members in alignment with each other.

X 24. A tilt mechanism as set forth in claim 15 wherein said second tubular member has a pair of oppositely disposed elongated slots and said pin projects through said slots for grasping thereof.